

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for producing a porous film wherein a porous film of a poly(vinylidene fluoride) based resin is prepared by dissolving the poly(vinylidene fluoride) based resin in a poor solvent through heating to form a liquid raw material for a film, and then cooling the liquid raw material at temperature of 170°C or above to bring about a phase separation, characterized in that an organized clay being organized by a hydrophilic compound is dispersed in said liquid raw material for a film in an amount of 1 to 25 parts by weight relative to 100 parts by weight of the poly(vinylidene fluoride) based resin, wherein the organized clay is in the form of grains having an average particle size of 0.01 to 0.3 μ m.

2. (Original) The method for producing a porous film according to claim 1, wherein the temperature of said liquid raw material for a film before cooling is 170°C or above and lower than the thermal decomposition temperature of the poly(vinylidene fluoride) based resin.

3. (Withdrawn) A porous film comprising a poly(vinylidene fluoride) based resin and an organized clay being organized by a hydrophilic compound, the organized clay being dispersed therein in an amount of 1 to 25 parts by weight relative to 100 parts by weight of the poly(vinylidene fluoride) based resin, wherein a microstructure is formed by a thermally induced phase separation method of cooling the liquid raw material at temperature of 170°C or above to bring about a phase separation, said microstructure having an irregularly shaped resin phase continuous in a three-dimensional manner with a network structure and having irregularly shaped pore spaces therebetween.

4. (Withdrawn) The porous film according to claim 3, wherein said organized clay is a clay prepared by organizing a layered inorganic silicate with an alkylene oxide compound.

5. (Previously Presented) The method for producing a porous film according to claim 1, wherein said organized clay is a clay prepared by organizing a layered inorganic silicate with an alkylene oxide compound.

6. (Withdrawn) The porous film according to claim 3, wherein the temperature of said liquid raw material for a film before cooling is 170°C or above and lower than the thermal decomposition temperature of the poly(vinylidene fluoride) based resin.

7. (Previously Presented) The method for producing a porous film according to claim 1, wherein said porous film comprises a microstructure having a non-uniformly shaped resin phase continuous in a three-dimensional manner with a network structure and having irregularly shaped pore spaces therebetween.

8. (Previously Presented) The method for producing a porous film according to claim 1, wherein said organized clay is a clay prepared by organizing a layered inorganic silicate with a hydrophilic compound, wherein said hydrophilic compound is an organic onium ion.

9. (Previously Presented) The method for producing a porous film according to claim 1, wherein said poor solvent comprises a phthalic acid ester.

10. (Previously Presented) The method for producing a porous film according to claim 1, wherein said porous film has an average pore diameter of 0.1 to 8 μm .

11. (Withdrawn) The porous film according to claim 3, wherein said porous film has an average pore diameter of 0.1 to 8 μm .

12. (Previously Presented) The method for producing a porous film according to claim 1, wherein said porous film has a porosity of 50 to 90%.

13. (Withdrawn) The porous film according to claim 3, wherein said porous film has a porosity of 50 to 90%.

14. (Canceled)

15. (Currently Amended) The method for producing a porous film according to claim 1, wherein the formation of spherical crystal structures of the poly(vinylidene fluoride) in the film is suppressed ~~relative~~ compared to a film formed without the use of the organized clay.

16. (New) The method for producing a porous film according to claim 1, wherein the hydrophilic compound is selected from the group consisting of an organic onium ion-containing compound and an alkylene oxide-containing compound.